

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service  
National Institutes of Health

John E. Fogarty International Center  
for Advanced Study in the Health Sciences

Advisory Board  
Summary Minutes

Date: September 13, 2005  
Place: Lawton Chiles International House  
National Institutes of Health

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service  
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John E. Fogarty International Center  
for Advanced Study in the Health Sciences

Sixty-first Meeting of the Advisory Board

Minutes of Meeting  
September 13, 2005

The John E. Fogarty International Center for Advanced Study in the Health Sciences (FIC) convened the sixty-first meeting of its Advisory Board on Tuesday, September 13, 2005, at 8:40 a.m., in the Conference Room of the Lawton Chiles International House, National Institutes of Health (NIH), Bethesda, Maryland. The meeting was open to the public from 8:40 a.m. to 12:25 p.m., followed by the closed session, from 1:00 p.m. to adjournment at 2:00 p.m., as provided in Sections 552b(c) (4) and 552b(c) (6), Title 5, U.S. Code, and Section 10 (d) of Public Law 92-463, for the review, discussion, and evaluation of grant applications and related information.<sup>1</sup> Dr. Sharon Hrynkow, Chair, Fogarty International Center Advisory Board, and Acting Director, FIC, presided. The Board roster is appended as Attachment 1.

- I. Call to Order, Opening Remarks
- II. Minutes of Previous Meeting
- III. Review of Confidentiality and Conflict of Interest
- IV. Dates of Future Board Meetings
- V. Community Development: Behavior Change and Social Entrepreneurship
- VI. The Global Telemedicine and Teaching Network as a Tool for an FIC/MMC Partnership
- VII. Report of the Director
- VIII. Review of Applications

**Board Members Present:**

Dr. Elizabeth Barrett-Connor  
Dr. Douglas C. Heimburger  
Dr. Arthur Kleinman  
Dr. Sharon L. Ramey  
Dr. Lee W. Riley  
Dr. William A. Vega  
Dr. May L. Wykle

**Board Members Absent:**

Dr. Patricia M. Danzon  
Dr. Wafaie Fawzi  
Mr. Dikembe Mutombo<sup>2</sup>  
Dr. Robert A. Redfield  
Dr. Burton H. Singer

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<sup>1</sup> Members absent themselves from the meeting when the Board discusses applications from their own institutions or when a conflict of interest might occur. The procedure applies only to individual applications discussed, not to *en bloc* actions.

<sup>2</sup> Appointment pending.

**Invited Speakers:**

Dr. David Abrams, Director, Office of Behavioral and Social Sciences Research, and Associate Director, Office of the Director, NIH

Mr. Frank Brady, Founder and Chair, Board of Trustees, Medical Missions for Children, Paterson, NJ, and Mrs. Peg Brady, Executive Director, Medical Missions for Children, Paterson, NJ

**Federal Employees Present:**

Ms. Rona Alarapon, FIC/NIH  
Ms. Danielle Bielenstein, FIC/NIH  
Dr. Joel Breman, FIC/NIH  
Dr. Kenneth Bridbord, FIC/NIH  
Mr. Bruce Butrum, FIC/NIH  
Dr. Ana Chepelinsky, FIC/NIH  
Ms. Tina Chung, FIC/NIH  
Dr. Lois K. Cohen, NIDCR/NIH  
Dr. Elizabeth Ann Davis, FIC/NIH  
Dr. Jean Flagg-Newton, FIC/NIH  
Dr. Dan Gerendasy, CSR/NIH  
Dr. James Herrington, FIC/NIH  
Dr. Sharon Hrynkow, FIC/NIH  
Dr. Dean Jamison, FIC/NIH  
Mr. Andrew Jones, FIC/NIH  
Dr. Richard M. Krause, FIC/NIH  
Ms. Judy Levin, FIC/NIH  
Ms. Sonja Madera, FIC/NIH  
Mr. John Makulowich, FIC/NIH  
Dr. Kathleen Michels, FIC/NIH  
Mr. Richard Miller, FIC/NIH  
Ms. Sherri Park, NICHD/NIH  
Dr. Joshua Rosenthal, FIC/NIH  
Mr. Randolph Williams, FIC/NIH

**OPEN SESSION****I. CALL TO ORDER, OPENING REMARKS**

Dr. Sharon Hrynkow called the meeting to order and welcomed Dr. Elizabeth Barrett-Connor, other Board members, and guests—Dr. Barrett-Connor was attending her first full meeting as a Board member. She thanked Board members Drs. Sharon L. Ramey and Robert R. Redfield for extending their service on the Board for an additional 6 months. Dr. Hrynkow extended a special welcome to the guest speakers: Dr. David Abrams, Director, Office of Behavioral and Social Sciences Research, and Associate Director, Office of the Director, NIH, and Mr. Frank Brady, Founder and Chair, Board of Trustees, and Mrs. Peg Brady, Executive Director, Medical Missions

for Children, Paterson, New Jersey. She also acknowledged Dr. Lois K. Cohen, Associate Director for International Health, National Institute of Dental and Craniofacial Research (NIDCR), and Dr. Richard M. Krause, former Director, National Institute of Allergy and Infectious Diseases, who has served FIC for many years as Senior Advisor.

## II. MINUTES OF PREVIOUS MEETING

The minutes of the Advisory Board meeting of May 24, 2005, were considered and approved unanimously.

## III. REVIEW OF CONFIDENTIALITY AND CONFLICT OF INTEREST

The rules and regulations pertaining to conflict of interest were maintained.

## IV. DATES OF FUTURE BOARD MEETINGS

The following meeting dates are confirmed:

Tuesday, February 7, 2006  
Tuesday, May 23, 2006  
Tuesday, September 12, 2006  
  
Tuesday, February 6, 2007  
Tuesday, May 22, 2007  
Tuesday, September 11, 2007

All subcommittees of the Board will meet on the Monday preceding each Board meeting.

## V. COMMUNITY DEVELOPMENT: BEHAVIOR CHANGE AND SOCIAL ENTREPRENEURSHIP

Dr. David Abrams, Director, Office of Behavioral and Social Sciences Research (OBSSR), and Associate Director, Office of the Director, NIH

Dr. Abrams' presentation focused on five areas: the activities of OBSSR, challenges in translational research, opportunities for behavioral and social sciences research, application of behavioral principles to global health and disease, and the value of social entrepreneurship.

### Overview of OBSSR

Dr. Abrams explained the relationship of OBSSR to the NIH institutes and centers (ICs) and highlighted its mission. Located within the Office of the Director, NIH, OBSSR does not fund grants; its activities are largely extramural and span the 27 NIH ICs. The Office fosters and supports behavioral and social sciences research with and through the NIH ICs. The OBSSR has four mission components: (i) to increase the scope of and support for behavioral and social sciences

research across NIH and the scientific community; (ii) to inform and advise the NIH Director and key officials of trends having significant bearing on the missions of NIH, the U.S. Department of Health and Human Services (DHHS), and other Federal agencies; (iii) to represent and serve as the entity for synthesizing existing knowledge in the behavioral and social sciences; and (iv) to disseminate behavioral and social sciences information to constituencies, stakeholders, and the public. Since arriving at NIH 6 months ago as the director of OBSSR, Dr. Abrams has initiated a strategic planning process to update the strategic plan for the Office. The current strategic plan for OBSSR was developed 10 years ago when Congress established the Office.

Community and population health, which is a priority for OBSSR, is reflected in the diverse areas that the Office supports, such as adherence to treatments and interventions, prevention of violence among youth, maintenance of behavioral changes (e.g., to stop smoking and alcohol abuse), research methods and measurement of outcomes, sociocultural dimensions of health, and other topics of relevance across the ICs. The OBSSR also raises the visibility and credibility of behavioral and social sciences research by sponsoring conferences, seminars, and hearings; collaborating with nongovernmental organizations and other government agencies; engaging professional organizations and the research community; and generating health and research publications.

In Fiscal Year (FY) 2004, NIH allocated almost \$3 billion, or approximately 10 percent of the NIH budget, to behavioral and social sciences research funded directly by the ICs. During the past 5 years, the level of funding for behavioral and social sciences research has kept pace with the doubling of the NIH budget.

### Challenges in Translational Research

Dr. Abrams noted that the greatest challenge in 21<sup>st</sup>-century science is transdisciplinary integration—combining the efforts of scientists from multiple disciplines to understand the full complexity of gene-environment interactions. He added that by applying existing knowledge to modify lifestyles and risk factors in populations, particularly in groups at disproportionate risk, the burden and cost of chronic diseases could be reduced by 40-60 percent. The challenge, however, is carrying out change at the population level. To do this, researchers must adopt transdisciplinary models that optimally integrate evidence-based best practices from basic and translational/clinical research into cost-effective and efficient interventions that can be delivered to the majority of individuals in communities. In order to shift population curves for chronic diseases downward, researchers must embrace dissemination research projects, and governments must have rational health policies that are based on sound science.

“All countries can learn from one another,” Dr. Abrams noted. For example, U.S. models may be applicable in developing countries, and experiences in developing and other countries may yield principles that are applicable to interventions in the United States, especially for populations living in poverty and suffering disparities in health. Dr. Abrams emphasized the availability of community dissemination research (i.e., translation of existing knowledge into widespread practice) in selected settings and drew the Board’s attention to the 10 priority research areas cited in an Institute of Medicine (IOM) report commissioned by OBSSR (see *New Horizons in Health: An Integrative Approach*, National Academies Press, Washington, DC, 2001).

## Opportunities for Behavioral and Social Science Research

Dr. Abrams noted the availability of a robust array of opportunities for behavioral and social science research. These opportunities include, but are not limited to: transdisciplinary research yielding unifying common principles that underpin development of new models, measures and methodologies; studies aimed at unraveling multiple, interacting determinants of complex, chronic diseases; the development of solutions from broad and various perspectives; and the application of recent advances in biostatistics, epidemiology, informatics, and biotechnology. Opportunities in two other areas were also highlighted: (i) transdisciplinary approaches to studying and understanding intra-individual variations in gene-gene and gene-environmental interactions and aggregate collective behaviors (i.e., population clusters, inter-individual variation, etc.) and (ii) studying patterns of behavior over time in individual populations.

Dr. Abrams emphasized that the prevention and treatment of chronic diseases require an appreciation of the element of time and an understanding of the units of analysis of time. By studying patterns of behavior over time in individuals and populations, interesting correlations and hypotheses of cause-effect relationships (e.g., patterns of tobacco use) can be revealed by investigating sensitive periods or phases, causal pathways, time-variant and time-invariant events, and turning points, transitions, and trajectories in health and disease across the lifespan of individuals and populations. Dr. Abrams also noted that longitudinal research that includes sampling of individuals and groups over long periods of time is possible and is essential for understanding the morbidity and mortality of chronic diseases.

Dr. Abrams stated that an increased burden of chronic disease would likely come just from tobacco use, and drawing from his own research, he cautioned that, 20–40 years hence, China will face significant disease among women who smoke. The percentage of women smoking has increased linearly in the past 10 years from less than 1 percent to more than 6 percent. This increase in China is growing exponentially, as it did previously in the United States, where tobacco is now the leading cause of disease and death by cancer among women. Another key issue is the need to attract behavioral and social scientists from developing and industrialized countries into research on global health issues. Cognizant of the potential for a “brain drain,” Dr. Abrams suggested that South Africa’s “brain gain campaign” could be an effective model to use for recruiting and retaining scientists in other developing countries.

## Behavioral Principles and Global Health and Disease

Dr. Abrams highlighted Mexico’s Program of Education, Health, and Nutrition (i.e., PROGRESSA) as an example of transdisciplinary research that is grounded in behavioral theories and is applicable to global health and disease. The intervention was initiated by the Government of Mexico in 1997 and subsequently renamed “Oportunidades.” The focus was on Mexico’s 2.6 million poor and mostly rural families. The intervention, a large-scale population- and policy-focused antipoverty program, targeted mothers and family groups and enjoyed government political support and commitment. It was based on the Skinnerian demand-reward approach (e.g., cash rewards were paid to mothers who participated in prenatal clinics, well-baby care, and an immunizations effort). The intervention involved anthropologists and sociologists and

applied existing knowledge in biology and behavioral science at community and policy levels. The intervention's strong research design included the randomization of intervention and control communities; longitudinal follow up; and involvement of community members, policymakers, and other stakeholders.

An independent evaluation of the impact of the program showed solid outcomes, which included improved nutrition, increased school enrollment and visits to health clinics, reduced child labor, and fewer illnesses among children ages 0–2 and 3–5. The conclusion is that trans-generational perpetuation and transmission of poverty can be prevented. Dr. Abrams added that the study also shows the value of adopting a “cell-to-society” approach for interventions that involve policymakers and community members. Obtaining the commitment of government, applying principles of social learning, focusing on public health interventions (e.g., nutrition, health care), and having a rigorous research design that is compatible with community and population goals and that includes long-term follow up were all essential components that made the intervention a success.

Several behavioral theories and models are applicable to transdisciplinary research on global health and disease. These include (i) behavioral change theories and models at the individual level (e.g., belief model), interpersonal level (e.g., social cognitive theory, social network and social support), and community and group level (e.g., organization changes), and (ii) integrative theories (e.g., trans-theoretical models such as PRECEDE/PROCEED, ecological models, nested context).

### Social Entrepreneurship

Dr. Abrams noted the grass-roots development of entrepreneurs worldwide and drew the Board's attention to a recent publication of case studies entitled *How to Change the World: Social Entrepreneurs and the Power of New Ideas* (David Bornstein, Oxford University Press, New York, 2004). The entrepreneurs described in the book are intuitive researchers who cross disciplinary boundaries, separate themselves from surrounding structures, are honest and sincere in their efforts, and are willing to share credit. Dr. Abrams suggested that an understanding of the essential behavioral characteristics underpinning the desire to be an entrepreneur would be useful in designing training programs.

### Conclusion

Dr. Abrams concluded by informing the group that behavioral and social scientists are making an impact in the world and have the potential to contribute even more to policies and practices with the knowledge they already have. He noted that powerful tools are available for reducing the burden of chronic diseases in a relatively short time. He stated that 60–80 percent of cancers could be eliminated if individuals change their lifestyles—30 percent and more could be eliminated by not smoking.

Researchers are developing models of dissemination research. One model, RE-AIM, has been developed by Dr. Russ Glasgow (Kaiser Permanente, Colorado) and colleagues [see the RE-AIM Web site at [www.re-aim.org](http://www.re-aim.org)]. This model refocuses research and methodology toward the ultimate goals of knowledge dissemination and policy change at the population level. The model

emphasizes external validity (i.e., generalizability) of practical studies and has the following five critical elements for successfully translating effective evidence-based treatments into widespread practice: (i) reach (number of individuals who are willing to participate in an intervention), (ii) efficacy/effectiveness (impact of an intervention on important outcomes), (iii) adoption (number of people willing to initiate an intervention), (iv) implementation (participant's use of intervention strategies), and (v) maintenance (the long-term effects of a program on outcomes after 6 or more months and the extent to which a program or policy becomes integrated into society). Impact (reach x efficacy), rather than efficacy, is the metric for measuring outcome.

Dr. Abrams said he is optimistic that model programs, such as PROGRESSA, and theoretical models, such as RE-AIM, can be successfully applied and evaluated. He commented that the designs and measures for translational research must incorporate the complexity and contextual qualities of the world rather than oversimplify them. Dr. Abrams concluded with the message that there was much science to do—from fundamental to clinical to community dissemination research—to inform policy and that, by working together in transdisciplinary teams in the 21<sup>st</sup> century, we could accelerate our ability to make a difference toward making the environment “more friendly” to our genes, rather than continuing in traditional ways to protect our genes from the environment.

## Discussion

The Board agreed that a study of the characteristics of entrepreneurs would be worthwhile and informative for the design of training programs. Members raised, as a point of consideration, the variety of theories and terminologies in the behavioral and social sciences, and they noted the difficulty that this complexity poses when designing, reviewing, and evaluating research. One option for consideration was a requirement that applicants of grants for behavioral and social sciences research discuss the links between social theories and demonstrate ways that the proposed research would advance theory. The members agreed that macrolevel interventions are needed in order to have a maximum impact on the global burden of disease. One member said that the burden of chronic diseases (e.g., cardiovascular disease) may not be changing in developing countries and may have always existed, but is only recently being documented or studied.

The Board also noted several challenges for behavioral and social scientists. These include: (i) development of models that apply existing knowledge in the behavioral and social sciences and that are appropriate for low-resource settings (e.g., those without adequate delivery systems); (ii) identification of social processes that are critical to the success or failure of health interventions such as the World Health Organization (WHO) “3 x 5” initiative to provide treatment for AIDS to 3 million people by 2005; (iii) determination of the link between a successful demonstration project (e.g., in mental health) and the generalizability of the intervention; and (iv) development of more innovative research designs and standards of evidence for international interventions.

The Board suggested that OBSSR could design evaluations, including measures and methodologies, to monitor and assess research projects that involve community participation. It was also noted that incentives are needed to encourage researchers to pursue transdisciplinary research. Dr. Abrams added that there was also a need to clearly define transdisciplinary research, develop appropriate criteria for evaluating transdisciplinary research proposals, identify the



essential skills and elements of transdisciplinary research for training young and mid-career investigators, and give credit to all investigators participating in a research project.

Dr. Hrynkow commented that the sharing of research credit on NIH-supported grants is already under consideration by the NIH leadership. She also noted the Board's strong support for behavioral and social sciences research at FIC and said that a large portion of the FIC budget supports this research. Dr. Hrynkow proposed that FIC and OBSSR work together to organize a more systematic approach for FIC-supported programs in the behavioral and social sciences, and she encouraged the Board to "get the word out" about FIC support for behavioral and social sciences research. Dr. Abrams replied that OBSSR could assist in developing and marketing this message.

#### VI. THE GLOBAL TELEMEDICINE AND TEACHING NETWORK AS A TOOL FOR AN FIC/MMC PARTNERSHIP

Mr. Frank Brady, Founder and Chair, Board of Trustees, Medical Missions for Children (MMC), Paterson, New Jersey

Mrs. Peg Brady, Executive Director of MMC, joined Mr. Brady at the Board meeting. The Bradys are social entrepreneurs in information technology and global health and cofounders of MMC. The MMC, a nongovernmental charity, was established in 2000. Its mission is to help the world's critically ill children, who are often "triaged out" from receiving care by doctors serving medical missions in developing countries. The MMC recently expanded its mission and vision to include providing a platform for medical diplomacy as a means to enhance the image of the United States around the world. Prior to his work with MMC, Mr. Brady developed the School of Diplomacy and International Relations at Seton Hall University, Newark, New Jersey.

Housed at St. Joseph Children's Hospital in Paterson, New Jersey, MMC supports five activities in partnership with other hospitals and organizations. Mr. Brady elaborated on each activity, giving major focus to the Telemedicine Outreach Program.

##### Telemedicine Outreach Program

The Telemedicine Outreach Program was launched in April 2000 to support virtual diagnostic consultations in hospitals via satellite. Through this program, physicians in 27 U.S. hospitals have participated in more than 23,500 consultations with physicians in hospitals and clinics in 36 underserved countries. Mr. Brady noted that, although each consultation is focused on diagnosing and treating a specific child's illness, the consultations have become learning forums involving many physicians at multiple hospitals across a country or region. In a related effort, MMC often supports, via telecommunications, the repair and updating of medical equipment and the training of hospital employees in developing countries.

##### Global Telemedicine and Teaching Network

The MMC's Global Telemedicine and Teaching Network (GTTN) has evolved within the telemedicine program. This network is made possible by strategic partnerships among MMC, two major corporations (Polycom, Inc., Intelsat Ltd.), the World Bank, and in-country political leaders

(First Ladies) and hospital administrators. The corporate partners donate telecommunications equipment, satellite time, and staff. The GTTN supports consultations between hospitals directly via satellite and through telephone and Internet connections. By using satellite bridges, GTTN can also be a tool for providing medical education from a mentoring hospital to up to eight underserved hospitals in other countries. Mr. Brady anticipates that up to 80 U.S. hospitals and medical centers will join the network. He noted that U.S. physicians welcome the opportunity to help children, have an intellectual interest in diseases in developing countries, and, if foreign born, view their participation as “payback” to their country. Showing a video of a telemedicine session that included examination of x rays and a patient, Dr. Brady noted that the consulting panels of physicians often correct misdiagnoses (a problem in approximately 30 percent of cases).

### Medical Broadcasting Channel

Interest in medical education led MMC to establish the Medical Broadcasting Channel (MBC) in November 2005. The MBC is fully licensed and can broadcast a full range of medical and disease information around the world and will soon include a dedicated channel for nurses. Expansion of the MBC is “mushrooming” as medical institutions (e.g., in Mexico) retransmit throughout their countries the broadcasts they receive. Mr. Brady projected that, within 2 years, MBC will reach 150,000 sites and communities, 1.5 million medical professionals, and 3–5 million viewers. The MBC uses five satellites, which communicate via a teleport in Paterson, New Jersey, with four other satellites that broadcast the information to in-country teleports. The MBC also disseminates information via telephone lines and Internet I and II protocols. For example, within participating countries, any individual with a computer can access symposia on demand for 30 days.

### Global Video Library of Medicine

Another MMC-sponsored activity is the Global Video Library of Medicine, to be launched in January 2006. This digital library of medical education videos will be powered by Video Bank, Inc., and will include content provided by many contributors, such as NIH, WHO, Food and Drug Administration, Howard Hughes Medical Institute, and academic centers such as The Johns Hopkins University.

### Giggles Children’s Theater and Mission Support Projects

A fourth activity is MMC’s Giggles Children’s Theater, which was established at St. Joseph Children’s Hospital in February 2005. The MMC broadcasts live performances by children at St. Joseph’s to other sites having a Giggles Children’s Theater.

The MMC also supports a rapidly growing number of Mission Support Projects in partnership with other organizations. For example, MMC provides grant-writing services to St. Joseph’s Hospital Regional Medical Center and also partners with IBM on the President’s Emergency Plan for AIDS Relief (PEPFAR).

## Conclusion

Mr. Brady noted that MMC's initial intent to help children has broadened to include enhancing the competence of countries and, thereby, helping more children. The MMC now has sufficient bandwidth to link groups together to disseminate information broadly around the world. Mr. Brady said that MMC is enthusiastic about partnering with FIC and other NIH components.

## Discussion

Dr. Hrynkow congratulated the Bradys on their vision, energy, and impact. She noted that FIC and NIH are collaborating with MMC to link with the Giggles Children's Theater and to include a teacher's series, which was developed by the NIH Clinical Center, in the content provided by MMC. In addition, FIC is considering ways to dovetail FIC's programs in more than 100 countries with MMC's technology and satellite capabilities. The Board suggested that these capabilities could provide an opportunity to introduce mental health consultations and content to institutions in developing countries.

## VII. REPORT OF THE DIRECTOR

Dr. Sharon H. Hrynkow, Acting Director, FIC

Dr. Hrynkow reported on personnel changes, the budget, activities across NIH, the FIC agenda, outreach efforts, and upcoming events. She focused on activities occurring in the past several months and solicited the Board's advice on future activities. The written Report of the Director, which was mailed to Board members, is appended to these minutes as Attachment 2. Additional details are provided in Attachment 2.

## FIC Personnel

**Changes.** Dr. Hrynkow introduced three new FIC staff members: Dr. James Herrington, Director, Division of International Relations (DIR); Dr. Elizabeth Ann Davis, Program Director for Europe, DIR; and Ms. Tina Chung, Program Director for Asia, DIR. Dr. Herrington, an epidemiologist, has focused on infectious diseases, particularly malaria, and has extensive scientific and international expertise. Dr. Davis, a veterinarian and epidemiologist, is interested in infectious diseases and has lived and worked abroad extensively. Ms. Chung previously served as International Health Officer in the Office of Global Health Affairs, Office of the Secretary, DHHS.

Dr. Hrynkow reported that Mr. Rob Eiss, Acting Director, DIR, and Senior Advisor for Strategic Initiatives, FIC, has taken a new position as Chief Executive Officer, Centre for the Management of Intellectual Property in Health R&D (MIR), Oxford, United Kingdom.

**Award.** Dr. Hrynkow noted that Dr. Jeanne McDermott, Program Director for AIDS and Maternal and Child Health, Division of International Training and Research (DITR), received the NIH Director's Award.

## The Budget

Mr. Richard Miller, Executive Officer, FIC, reported that the President's Budget for FIC for FY 2006 amounts to \$67 million, or approximately \$400,000 above the FIC budget for FY 2005. In June 2005, the House of Representatives passed an appropriations bill to fund NIH, including FIC, at the levels requested in the President's Budget. In July, the Senate Appropriations Committee proposed to increase the FIC budget to \$68.7 million, or approximately \$2.1 million (or 3.2 percent) above the FY 2005 budget. As next steps, the full Senate will take action on the proposed increase, and the House and Senate will confer on a final appropriation.

## Activities Across NIH

**Reauthorization Legislation.** Dr. Hrynkow noted that the House Energy and Commerce Committee is considering legislation to reauthorize NIH. Two elements of the proposed legislation are (i) creation at NIH of a new Division of Program Coordination, Planning, and Strategic Initiatives and (ii) establishment of a Common Fund. The new division, within the the Office of the Director, NIH, would identify priority research areas and unifying themes (e.g., prevention) across the ICs that would be funded corporately by the ICs as trans-NIH initiatives. Dr. Hrynkow noted that this activity is consistent with the NIH Roadmap, which is a model for supporting trans-NIH opportunities, and is supported by the NIH leadership. The NIH reauthorization legislation would have to pass in both the House and Senate—a process that could take months.

## FIC Agenda

Dr. Hrynkow and staff reported on recent activities within two broad mission areas: global health research and training, and outreach and diplomacy.

### Global Health Research and Training

**Framework Programs for Global Health.** Dr. Flora Katz, Program Officer, DITR, reported that FIC received 31 high-quality applications for the new Framework Programs for Global Health. Four of the applications were for 2-year planning grants, and two of these were submitted by institutions in developing countries. The aim of the program is to support multi- and transdisciplinary consortia among different schools at one university or multiple universities. The program also supports development of curricula on global health for undergraduate and graduate students. Dr. Katz noted that the research community and the review committee have responded enthusiastically to this program.

**Global Health Research Initiative Program (GRIP).** Dr. Hrynkow provided an update on the GRIP Program, which has been phenomenally successful in attracting applicants. In early June, FIC hosted a reception for the 45 GRIP awardees in conjunction with the GRIP Awardee Networking Meeting. Dr. Zerhouni and the daughter of the late Congressman John Fogarty attended the reception. Dr. Hrynkow noted that the GRIP awardees, or "FIC ambassadors," shared their views on the resources they will need to continue as independent scientists in their respective home countries after their GRIP awards have ended. The awardees are in their 3<sup>rd</sup> year of the 5-year

award, which provides \$50,000 per year to support reentry of scientists trained in FIC or NIH intramural programs.

***Masters of Public Health (MPH) Program in Russia.*** Dr. Kenneth Bridbord, Director, DITR, announced that the first-ever MPH program in Russia was launched on September 14 at St. Petersburg State University. Dr. Jeanne McDermott represented FIC at the inaugural ceremony. Through nine FIC training and research programs and in concert with Dr. Michael Merson of Yale University, FIC has supported faculty training and curriculum development, and approximately 20 students have been accepted into the initial program. The FIC previously supported establishment of the first public health programs in Malawi and Ukraine, and staff are involved in discussions to establish similar programs in the Republic of Georgia and India.

***Disease Control Priorities Project (DCPP).*** Dr. Dean Jamison, Fellow, Division of Advanced Studies and Policy Analysis (DASPA), reported that the second assessment of the burden of disease in developing countries is near completion. Undertaken by the WHO, World Bank, and FIC, with major support from the Bill and Melinda Gates Foundation, this effort expands and updates the initial study that resulted in the 1992 publication, *Disease Control Priorities in Developing Countries*. The products of this second effort, which will be released in Beijing, China, in April 2006, are two technical books, *Disease Control Priorities in Developing Countries*, 2<sup>nd</sup> edition, and *The Burden of Disease and Risk Factors* (Oxford University Press) and a policy-oriented book, *Priorities in Health* (World Bank). For the past 4 years, FIC has hosted the secretariat for DCPP and has provided staffing and other resources. FIC will continue its involvement through the dissemination phase, which is being funded by the Bill and Melinda Gates Foundation.

***International Leadership Program for Women in the Health Sciences.*** On May 30–June 1, FIC hosted a leadership training workshop for women scientists with GRIP awards. Dr. Hrynkow noted that the workshop was the first of two planned follow-on activities to FIC's October 2003 Colloquium on Career Paths for Women in the Health Sciences: A Global Perspective. The successful training session drew on experts from Drexel University, Philadelphia, Pennsylvania. The participants reported the training as transforming, thus encouraging FIC to incorporate leadership training into its extramural programs as financially feasible.

***Pilot Internet Mentoring Project for Women.*** As a second follow-up activity to the 2003 colloquium, FIC is creating an Internet-based mentoring curriculum. In collaboration with the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and its Latin America Chair for Women in Science, FIC is funding a pilot effort to develop a curriculum and to identify mentors and trainees that can be linked for real-time, Internet dialogue using a software program that has been very effective for globally linking grantees in another FIC program.

***Ecology of Infectious Diseases (EID) Program.*** Dr. Joshua Rosenthal, Deputy Director, DITR, reported on the July 2005 review of the EID program. Established approximately 5 years ago in collaboration with the National Science Foundation (NSF) and several ICs, the EID program has supported approximately 36 research training awards. The program's aims are: (i) to broaden the thinking about emerging diseases and transmission of infectious agents beyond the traditional foci of pathogenesis and treatment, to include consideration of animal reservoirs and behavior, and

(ii) to develop predictive models for understanding emerging diseases in the context of environmental changes such as deforestation and urbanization. Dr. Rosenthal noted that the program has developed leadership for research in this area and has stimulated interest and publications. The review panel strongly endorsed the program and made specific recommendations for improving it.

Board member Dr. Lee W. Riley, who participated in the review, said that the panel was very enthusiastic about the program and strongly encouraged FIC to continue it. He noted that FIC is playing a unique role by supporting this program and closing a research gap that is not being addressed by NSF or another IC.

### Outreach and Diplomacy

**Communications.** Dr. Hrynkow highlighted FIC's robust communications strategy and noted that FIC has been active in "telling its story" to a variety of audiences. At the request of Congressman Patrick Kennedy (D-RI), FIC provided an overview of its programs and priorities. Subsequently, the Congressman invited FIC to convene a second briefing on mental health issues, as follow up to last year's briefing on this topic. In addition, he expressed interest in participating in an FIC–Brown University event on global health that is expected to take place in spring 2006.

**Global Health Outreach.** FIC also continues to discuss and engage in collaborations with various groups at the National Academies, and particularly with the IOM's Board on Global Health. Dr. Hrynkow noted that she has joined Dr. Zerhouni or acted on his behalf, and has worked in close partnership with other ICs in meeting with foreign delegations at NIH to describe NIH programs and priorities. Many of these meetings have led to concrete action items, such as expanded cooperation in vision research in India.

**Working with "NIHs" Around the World.** Dr. Hrynkow noted two additional items reflecting FIC's relationship with Dr. Zerhouni. In June, she represented the Director, NIH, at a meeting of his counterparts from other international research organizations, in London, United Kingdom. The group decided to focus joint attention and support on capacity-building programs in Africa. Dr. Hrynkow said that Dr. Zerhouni fully supports this highly visible activity.

**Publications.** Dr. Hrynkow also reported that Dr. Zerhouni and she coauthored an article on international activities at NIH. This article, entitled "Moving Beyond Disciplines and Geography to Support Health Research: The NIH Experience," is being published as part of the Global Forum on Health Research, which is under way in Mumbai, India, September 13–18. The two main messages in the article are that (i) NIH is open to receiving applications from investigators and institutions anywhere in the world and encourages other medical research agencies to do the same, and (ii) transdisciplinarity is the "wave of the future" and should be embraced.

Dr. Hrynkow noted that openness is a central tenet of the culture of global science and that transdisciplinarity is a key feature of the NIH Roadmap. She mentioned that the article comments on the unique role of FIC as a medical research entity that both handles the diplomatic functions of its parent agency and has a robust research and training program in global health. She encouraged the Board to help FIC publicize the article.

## Upcoming Events

***Indigenous People's Research.*** Dr. Hrynkow reported that FIC is proceeding with development of a joint collaboration with Canada, New Zealand, and Australia. She will meet with counterparts from these countries prior to an October 2005 Conference on International Network for Indigenous Health Knowledge and Development, in Vancouver, Canada. She noted that Dr. Zerhouni signed the NIH–Canadian Institutes of Health Research agreement on indigenous people's research in 2004. FIC is taking a leadership role at NIH, with the National Center for Minority Health and Health Disparities, to frame a potential program involving other international partners.

***Meetings and Lectures.*** Dr. Hrynkow invited Board members to participate in several upcoming activities, as follows.

*September 26, 2005:* FIC and the American Association of Medical Colleges will convene a small consultation to consider how to continue to support, during their residency training, U.S. medical students who participated in the Fogarty–Ellison Fellowships in Global Health and Clinical Research program. The aim is to maintain their interests and projects in international clinical research.

*October 7, 2005:* FIC will cosponsor, with the National Institute of Child Health and Human Development, the 7<sup>th</sup> annual Lawton Chiles International Lecture. The speaker is Jose Ignacio Santos, Director General, Hospital Infantil de Mexico Federico Gomez, Mexico City, Mexico. His topic is “Defining Mexico's Priorities in Pediatric Research, Education, and Training.”

*November 15, 2005:* FIC will cosponsor, with NIDCR, the Barmes Lecture in Global Health. The speaker at this major NIH lecture is Dr. Rita Colwell, former Director, NSF, and former Board member. Dr. Colwell is currently Chairman, Canon U.S. Life Sciences, Inc., and Distinguished Professor, University of Maryland, College Park, and Johns Hopkins University Bloomberg School of Public Health. The topic of her lecture is “Global Climate, Environmental Pathogens, and Human Health: A New Paradigm.”

## Discussion

Dr. Abrams invited the Board to attend the 10<sup>th</sup> anniversary celebration of OBSSR on June 21–22, 2006. The celebration will highlight global health and disease, behavioral and biological interactions, and transdisciplinary research. Dr. Hrynkow noted that FIC will be pleased to suggest FIC grantees who could participate and give presentations.

Dr. Abrams commented on the transformation taking place in global informatics technology. This technology is increasingly being used to transmit knowledge, improve health literacy, promote health, and empower self-change among individuals and populations throughout the world. For example, several Internet sites offer evidence-based, individually tailored, mass-customized interactive interventions to help individuals and populations quit smoking. Dr. Brady noted that retention rates for information provided via video are much higher than those for information provided via lectures or reading.

The Board noted the need for a clearinghouse on global health and suggested that FIC could support such a function. Dr. Hrynkow agreed that this function is appropriate for FIC. She said that FIC already is developing a list of foundations working in global health and will post this resource on the FIC Web site.

The Board also encouraged FIC to consider studying the ethical impulses that “fuel” an individual’s interest in and commitment to global health. A better understanding of these impulses would be useful for development and expansion of programs to recruit and retain students and young investigators in the global health arena.

Dr. Krause mentioned that the collaboration on indigenous people’s research with Canada, New Zealand, and Australia could be broadened to include indigenous people in neighboring Malaysia and South India, who also have serious health needs.

Dr. Hrynkow thanked the Board for their excellent insights. She thanked the guests who gave presentations and the FIC staff for their continuing efforts.

## VIII. REVIEW OF APPLICATIONS

Dr. Hrynkow chaired the remainder of the meeting during which the Research Awards Subcommittee reported on its activities. The FIC Advisory Board reviewed a total of 51 scored competing applications at its September 13 meeting.<sup>3</sup> The applications were in the following programs:

- 17 applications for the Fogarty International Research Collaboration Award (FIRCA), out of a total of 96 applications, for \$544,000;
- 4 applications for the International Clinical, Operational, and Health Services Research Training Award Program for AIDS and Tuberculosis (ICOHRTA-AIDS/TB), out of a total of 4 applications, for \$1,098,642;
- 15 applications for the Framework Programs for Global Health, out of a total of 32 applications, for \$1,592,966;
- 3 applications for the International Cooperative Biodiversity Groups (ICBG), out of a total of 7 applications, for \$1,788,884;
- 12 applications for the International Research Scientist Development Award (IRSDA) Program, out of a total of 17 applications, for \$1,209,680.

The Board concurred with the initial review group recommendations for 51 out of 51 applications.

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<sup>3</sup> Applications that were noncompetitive, unscored, or not recommended for further consideration by initial review groups were not considered by the Board.



## IX. ADJOURNMENT

There being no further business, the meeting was adjourned at 2:00 p.m. on September 13, 2005.

## CERTIFICATION

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Sharon Hrynkow, Ph.D.  
Chairperson, Fogarty International  
Center Advisory Board, and  
Acting Director,  
Fogarty International Center

Jean Flagg-Newton, Ph.D.  
Executive Secretary, Fogarty International  
Center Advisory Board,  
Fogarty International Center

## ATTACHMENTS

1 - Board Roster

### Abbreviations Used in the Minutes

AIDS	-	Acquired Immunodeficiency Syndrome
CSR	-	Center for Scientific Review
DASPA	-	Division of Advanced Studies and Policy Analysis
DCPP	-	Disease Control Priorities Project
DHHS	-	U.S. Department of Health and Human Services
DIR	-	Division of International Relations
DITR	-	Division of International Training and Research
EID	-	Ecology of Infectious Diseases
FIC	-	John E. Fogarty International Center for Advanced Study in the Health Sciences
FIRCA	-	Fogarty International Research Collaboration Award
FY	-	Fiscal year
GRIP	-	Global Health Research Initiative Program for New Foreign Investigators
GTTN	-	Global Telemedicine and Teaching Network
ICBG	-	International Cooperative Biodiversity Groups
ICOHRTA-AIDS/TB	-	International Clinical, Operational, and Health Services Research Training Award Program for AIDS and Tuberculosis
ICs	-	Institutes and centers
IOM	-	Institute of Medicine
IRSDA	-	International Research Scientist Development Award
MBC	-	Medical Broadcasting Channel
MIR	-	Centre for the Management of Intellectual Property in Health R&D
MMC	-	Medical Missions for Children
MPH	-	Masters of Public Health
NICHD	-	National Institute of Child Health and Human Development
NIDCR	-	National Institute of Dental and Craniofacial Research
NIH	-	National Institutes of Health
NSF	-	National Science Foundation
OBSSR	-	Office of Behavioral and Social Sciences Research
PEPFAR	-	President's Emergency Plan for AIDS Relief
PROGRESSA	-	Mexico's Program of Education, Health, and Nutrition
RE-AIM	-	Reach, Effectiveness, Adoption, Implementation, and Maintenance
UNESCO	-	United Nations Educational, Scientific, and Cultural Organization
WHO	-	World Health Organization

**FOGARTY INTERNATIONAL CENTER  
ADVISORY BOARD  
ROSTER**

(All terms end January 31)

**September 2005**

Sharon **Hrynkow**, Ph.D. (Chair)  
Acting Director  
Fogarty International Center

Elizabeth **Barrett-Connor**, M.D.   **2008**  
Professor and Division Chief  
Division of Epidemiology  
Department of Family and Preventive Medicine  
University of California, San Diego  
La Jolla, California 92093-0607

Patricia M. **Danzon**, Ph.D.           **2008**  
Ceilia Moh Professor  
Health Care Systems Department  
The Wharton School  
University of Pennsylvania  
Philadelphia, PA 19104-6218

Wafaie **Fawzi**, M.D., Dr. P.H.   **2007**  
Associate Professor of Nutrition  
and Epidemiology  
Department of Nutrition  
Harvard School of Public Health  
Boston, Massachusetts 02115

Douglas C. **Heimbarger**, M.D., M.S. **2008**  
Professor, Division of Clinical Nutrition  
and Dietetics  
Departments of Nutrition Sciences and Medicine  
University of Alabama at Birmingham  
Birmingham, AL 35294-3360

Arthur **Kleinman**, M.D., M.A.       **2009**  
Esther and Sidney Rabb Professor and Chair  
Department of Anthropology  
Harvard University  
Cambridge, MA 02138

Dikembe **Mutombo**\*               **2006**  
Dikembe Mutombo Foundation  
Atlanta, Georgia 30327  
\*Appointment pending

Sharon L. **Ramey**, Ph.D.       **2006**  
Susan H. Mayer Professor of Child and Family Studies  
Georgetown University School of Nursing and  
Health Studies, and Founding Director  
Georgetown Center on Health and Education  
Washington, D.C. 20057-1107

Robert R. **Redfield**, M.D.       **2006**  
Professor of Medicine  
University of Maryland, Baltimore  
Baltimore, Maryland 21201-1192

Lee W. **Riley**, M.D.       **2007**  
Professor of Infectious Diseases  
and Epidemiology  
School of Public Health  
University of California Berkeley  
Berkeley, California 94720

Burton H. **Singer**, Ph.D.   **2006**  
Charles and Marie Robertson Professor  
of Public and International Affairs  
Professor of Demography and Public Affairs  
Princeton University  
Princeton, New Jersey 08544

William A. **Vega**, Ph.D.   **2009**  
Professor of Psychiatry  
Robert Wood Johnson Medical School  
Piscataway, NJ 08854

May L. **Wykle**, Ph.D.       **2007**  
Dean  
Frances Payne Bolton School of Nursing  
Case Western University  
Cleveland, Ohio 44106

**Executive Secretary**  
Jean Flagg-Newton, Ph.D.  
Office of the Director  
Fogarty International Center  
National Institutes of Health  
Bethesda, MD 20892

\* Appointment Pending